Prevention of depression and anxiety in older people

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Prevention of depression and anxiety in older people

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door

Petronella Jacoba van 't Veer-Tazelaar

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aan de nagedachtenis van mijn moeder
in dank aan mijn vader
voor Mars

Page Break

Contents

Page Break

Page Break

CHAPTER 1

General Introduction

Nelleke van 't Veer-Tazelaar

Prevention of depression and anxiety in older people

1 General Introduction

This thesis focuses on the prevention of anxiety and depression in later life. To this end, we evaluated the feasibility and effectiveness of a generic stepped-care

prevention programme among elderly people with a high risk of developing these disorders. In the following chapters of this thesis we present our findings in general and the results of the evaluation. In the first chapter we discuss the health care problem that was addressed, and the main concepts and theoretical assumptions that motivated our aims and the design of the study.

1.1 Growing old

It is only in the past one hundred years that growing old has become commonplace. Old age was extremely rare in prehistoric times, and even up until the 17th century only about 1% of the population lived for longer than 65 years. Around the year 2020, approximately one quarter of the population in Western countries will be in the oldest age-group. By that time, the age-group of people over 65 will be larger than the age-group of people under 20 years of age. This means a dramatic reversal of all previous demographics (Pifer & Bronte, 1986). With such fundamental changes occurring in the age-distribution of our society, it is more essential than ever for us to understand the nature of growing old, as well as the particular needs and abilities of older people. Growing old involves physiological, cognitive and social changes, and the emotional and psychological responses to these changes determine whether this final phase of life is experienced in a positive or a negative way.

Several models and conditions have been studied with respect to this response to aging. The 'Risk and Vulnerability' model, originally developed by Brown and colleagues (Brown & Harris, 1978; Brown, 1992), suggests that vulnerability factors interact with stressful life events and lead to depression and anxiety. Risk and vulnerability factors for depression and anxiety are quite similar (de Beurs et al., 2001), but it is the restrictions that are imposed by those risk factors (such as ill health, pain, disability, and anxiety) on social activities, social participation and daily living that are of key importance (Godfrey & Denby, 2004).

The model of 'Learned Helplessness' describes a psychological condition in which a human being or an animal has learned to act or behave in a helpless way in a particular situation, even when it is possible to change this unpleasant or even harmful situation. The learned helplessness theory is based on the assumption that clinical depression and related mental illnesses result from a perceived absence of control over the outcome of a situation (Seligman, 1975). Older people might learn how to be helpless simply because they are aging, and conclude that they have no control over losing their friends and family members,

losing their jobs and incomes, getting old and weak, and so on (Rodin, 1986). But learned helplessness can be minimised by "immunisation", and potentially reversed by therapy. People can be immunised against the perception that events are uncontrollable by increasing their awareness of previous positive experiences (Altmaier & Happ, 1985). Therapy can teach people how to deal with eventualities (Thornton & Powell, 1974) and bolster their self-esteem (Orbach & Hadas, 1982). So, although the normal course of aging does not necessarily entail a decline in mental health, certain physiological, cognitive, and social changes can have possible repercussions with adverse effects, such as depression and anxiety.

However, there is also the more optimistic socio-cultural model of aging, based on the concept of 'successful aging' developed by Baltes and Baltes (Baltes & Baltes, 1990). In this model, aging is a dynamic process involving both opportunities for personal development and growth, and adjustment to the experience of loss. It recognises that, while older people are actively engaged in trying to make sense of and adapt to the physical, social, inter-personal and psychological changes that accompany aging, embracing both learning and adjustment, the resources and opportunities that are available to them are shaped and constrained by the wider social context within which they live (Godfrey & Denby, 2004).

1.2 Late-life depression and anxiety

In older people, sub-clinical manifestations of depression and anxiety disorders are highly prevalent. They are the best predictors of the onset of full-blown disorders, but some of the consequences of these sub-clinical manifestations may already be just as deleterious as the syndromes themselves (Godfrey & Denby, 2004; Smit et al., 2008).

In this thesis we aimed at the prevention of both depression and anxiety disorders, because at all ages these two disorders seem to have overlapping symptoms (Stahl, 2008). They share many risk factors, and similar treatments have been shown to be effective. Therefore, in a prevention study, it is very likely that an intervention, if effective, would have effects on the onset of both depression and anxiety disorders.

1.2.1 Older people and depression

Almost all people experience depression in a relatively mild form several times in their lives. In most cases, the feeling of melancholy, or lack of interest or pleasure, is a reaction to a specific event. It would not typically be considered as a mental

illness, and it lasts only for a few days. Depression that merits clinical attention interferes with normal functioning, is characterised by a depressed mood (dysphoria) and loss of interest (anhedonia) during the greater part of the day, on most days, and lasts for at least two weeks. In addition, a person who is depressed is typically lacking in both mental and physical energy, and suffers from insomnia, poor concentration, loss or gain of body weight, irrational feelings of worthlessness and/or guilt, and recurrent thoughts about death and suicide. In order to meet the diagnostic criteria for depressive disorder, a person must have one or both core symptoms, dysphoria and/or anhedonia, plus at least four additional symptoms. There is general consensus on the definition of major depression (APA, 1987, 1994; WHO, 1992, 1993), but there is less agreement on the precise nature and clinical significance of minor depression.

Minor depression, or sub-threshold depression, is usually defined as the presence of some of the symptoms of depressive disorder, but not the diagnostic criteria for full-blown depressive disorder. However, although clinicians continue to struggle with the concept of "sub-threshold" and minor depression (Sadek & Bona, 2000), it is this part of the depressive disorder spectrum that is most relevant for the older age-group, in which clinically relevant symptoms of depression are quite prevalent (10-15%) and seem to increase with age (Beekman et al., 1999).

Minor depression, despite the implications of the term, is major in its prevalence and its negative impact on quality of life. Most studies have suggested that in older people minor depression is roughly twice as common as major depression, with an increase in frequency in residential or medical inpatients, compared to community-dwelling elderly people. Most studies also confirm the concept that minor depression steadily increases in frequency in a curvilinear fashion in frequency with old age, with a very steep increase in people over 80 years of age. Some studies have suggested that the increase in symptoms of depression when people get older can mainly be attributed to age-related changes in risk factors, such as functional impairment, ill health or disability, cognitive decline, and loneliness (Cole et al., 1999), rather than to aging itself (Roberts et al., 1997; Beekman et al., 1999; Blazer et al., 1991; Tannock & Katona, 1995). In addition to the risk factors mentioned above, the influence of gender is often mentioned in relation to depression. Women are more likely to be depressed than men, but this difference seems to disappear with age (Stek et al., 2004).

The elderly in the population are assumed to be particularly prone to minor depression, because of their increased tendency to alexithymia (the inability of

patients to verbalise or fantasise affective experience) and somatisation, which masks their depression (Tannock & Katona, 1995). Evidence that the elderly adults are less likely than younger people to report feelings of dysphoria (i.e. sadness, unhappiness, or irritability) suggests that the standard criteria for depression may be more difficult to apply to older adults, that they are disinclined to report such feelings, or that their experience of the so-called dysphoria is simply different. Elderly patients with depression who do not complain of sadness often have unexplained somatic complaints, and exhibit a sense of hopelessness (Gallo & Rabins, 1999) Other features that may indicate underlying depression include lack of interest in personal care and a slowing down of thought and activity, making it difficult to distinguish between depression and other health problems at an older age.

A concept such as depression could also be considered in a different light than the present approach towards this mental health problem, and consequently the solutions would be completely different. In his book “Beyond Depression”, Christopher Dowrick explains that to define depression only as a specific medical condition may prove to be insufficient, sometimes unnecessary, and even occasionally harmful. A diagnosis of depression, although useful to a certain extent, wraps up certain aspects of human experience and installs artificial boundaries around them, creating an artificial sense of order, and leads us towards treatment options which tend to reduce –rather than enhance- our ability to live our lives (Dowrick, 2004).

A diagnosis of a mental illness such as depression may bring the passive message that these people are ill and need professional interventions to care for them, or even to cure them. It could be useful to reflect on alternative ways of understanding the feelings and thoughts that are currently encapsulated within the concept of depression. Dowrick explains that our desire and curiosity, our understanding of our position in time and (social) space, our sources of engagement, our practices, our ability as storytellers, and our conversations, all combine to give us a coherence of self, an awareness of purpose and value, and a sense of meaning. These aspects offer a framework that is based not on medicine or concepts of disease, but on fundamental ideas about how to live our lives with a sense of enjoyment and fulfilment, and how to flourish as human beings. Dowrick suggests that we may do better with less diagnosis and more understanding, with fewer prescriptions and more listening, not considering patients as machines in need of an overhaul, but as persons leading their own lives.

However, this alternative approach to understanding and managing those problems which are currently conceptualised in terms of depression will require at least some time to season, and research is needed to assess this change in orientation.

1.2.2 Older people and anxiety

In depressed older people, anxiety is also frequently encountered (Gallo & Rabins, 1999). The prevalence of late-life anxiety disorders is estimated to be around 11% (Flint, 1994), and this serious health problem therefore seems to compete with the prevalence of clinically relevant symptoms of depression in later life, estimated to be around 12% (Beekman et al., 1999). Late-life anxiety is associated with increased disability and diminished well-being, and the utilisation of health services is increased in anxiety sufferers. Older people diagnosed with an anxiety disorder are equally affected in their functioning just as much as those who merely have symptoms of anxiety. But, in spite of its grave consequences for the quality of life, appropriate care for late-life anxiety is seldom provided (de Beurs et al., 1999).

The most common late-life anxiety disorders are mixed anxiety-depression, phobic disorders, and generalised anxiety disorder. It is less common that a new anxiety disorder develops for the first time in later life. Usually, a dormant anxiety condition has existed for some time (Beekman et al., 2004). Stressful events, such as the loss of a partner, can provoke an exacerbation of the dormant complaints. Physical illness, medication, alcohol, and cafeine may also be triggers that intensify the anxiety complaints.

Although anxiety disorders are among the most prevalent ailments in later life, adequate diagnosis is still in its infancy. The natural course, risk profile, and treatment of anxiety disorders in the elderly are remarkably under-studied. However, there are indications that the manifestation of anxiety in older people differs from that in younger people. Physical complaints, for instance, seem to be more prominent. In both panic disorder and generalised anxiety disorder, complaints like pain, tiredness, restlessness, lack of concentration, irritability, and sleep disorders are often mentioned by older people. In panic disorder, there are indications that panic attacks might be less frequent and less intense, that they are more often combined with dysthymia, and there is less evasive behaviour. Elderly people with generalised anxiety behaviour tend to be worried about more things and different things, compared to their younger counterparts. In social phobia, anxiety is increased in situations such as eating or writing in public. Typical stimuli provoking anxiety in adults with agoraphobia are: the street, shops, trains or buses,

and late-life agoraphobia can be triggered by hospitals, cemeteries, darkness, or having to cope with an uneven pavement or stairs, where there is a risk of falling. These differences in the manifestations of late-life anxiety have significant consequences for the diagnosis and treatment of this disorder in older people (Beekman et al., 2004).

1.3 Acknowledgement and diagnosis of late-life depression and anxiety symptoms

Many elderly patients have difficulty in acknowledging and discussing psychological problems with their health care providers when these arise, and consequently there is a large unmet need in the treatment of mental disorders. This is mainly due to patient and provider-related barriers, which should be considered from at least two perspectives (Unutzer et al., 1999).

Practical barriers for the patient can be: knowledge deficits or social isolation. Elderly patients may be reluctant to express a need for help, because people in this age-group still consider anxiety, and especially depression, to be slightly stigmatised problems. They may misinterpret depressive symptoms as features of physical illness or grief, or even regard them as being inextricably related to growing old. Other patient barriers may stem from 'existential challenges' in later life (Blazer, 1993): older people may see less and less meaning in their life, and consider seeking out appropriate help in such a condition to be rather pointless. So, emotional and psychological responses to growing old may also form severe hindrances to acknowledging psychological problems. Improving knowledge and understanding about mental health has been shown to reduce problems related to depression and anxiety, and to increase the patient's understanding about these disorders and how to manage them (Christensen et al., 2004). Increased understanding of mental disorders and beliefs about appropriate treatment, and mental health education, influence the patient's treatment-seeking behaviour (Fisher & Goldney, 2003).

Provider barriers are mainly: knowledge, skills and expertise. Late-life depression, in particular, is difficult to diagnose, also because older people often present with multiple chronic medical conditions. Awareness, training, recognition, communication, and the possible advantage of available screening tools and protocols, are all aspects that are included in late-life mental health teaching programmes for general practitioners and primary care professionals. Since 2008, primary care psychologists have become easily available in the Netherlands.

Finally, the source of another barrier in the acknowledgement of psychological problems may be ageist attitudes. These negative attitudes towards growing old are also two-sided. The internalisation of ageist attitudes can undermine the self-esteem and confidence of people, and make them reluctant to ask for help. On the other hand, ageist attitudes and behaviour in professional practice of professionals stem from beliefs that mental health problems such as anxiety and depression are simply features that are often present in later life, due to accompanying physical ill health.

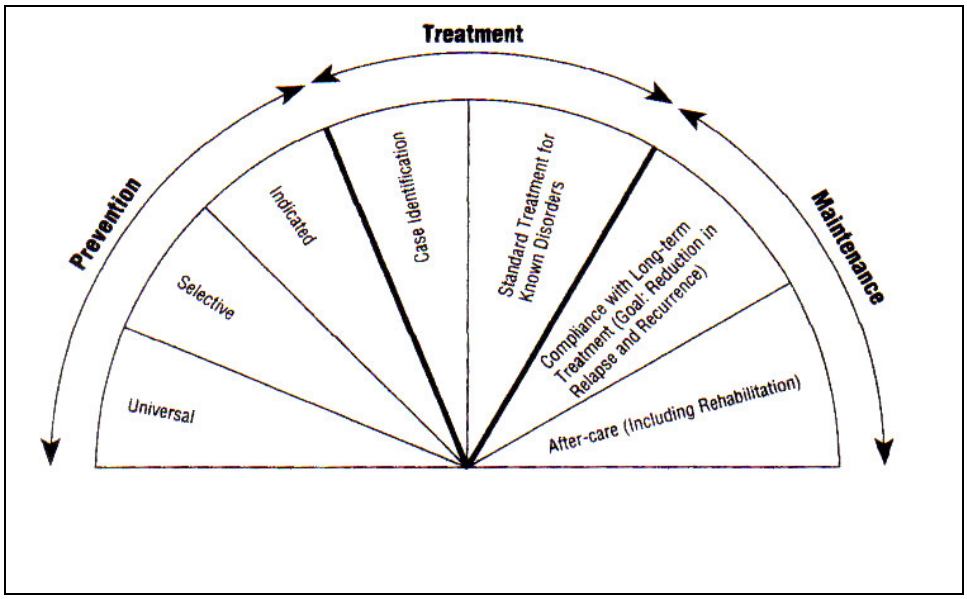
It is obvious that late-life anxiety and depression are disabling disorders with crippling effects on the quality of the remaining years of the life of older people. These serious conditions frequently complicate physical health problems, they result in increased utilisation of health services, have economical consequences and may even lead to premature death (de Beurs et al., 1999; Beekman et al., 2002). Both of these mental disorders are often under-diagnosed, and when treatment is provided for anxiety, benzodiazepines are over-prescribed and antidepressants are under-prescribed (Mahgoub et al., 2008; Schuurmans et al., 2006). Treatment for depression offers only limited possibilities to reduce its prevalence. So, while we observe a high prevalence of late-life depression and anxiety disorders, we are confronted with inadequate and/or insufficient treatment (Schuurmans et al., 2006; Unutzer & Bruce, 2002). We therefore observe a regrettably high burden of disease in this fast-growing older section of the population, in which additional mental rescue approaches are urgently needed.

A promising and feasible approach towards depression and anxiety in older people is suggested in the form of prevention (Davis, 2002; Smit et al., 2006).

1.4 Prevention of late-life depression and anxiety

Mrazek and Haggerty suggest three types of interventions to prevent mental disorders (Mrazek & Haggerty, 1994); Firstly, ‘universal preventive interventions’, directed at the entire population, regardless of any risk status (e.g. mass media campaigns); secondly, ‘selective preventive interventions’, directed at people with an increased risk of developing a mental disorder because they have been exposed to risk factors (e.g. support groups for widows), but who have not yet developed symptoms. Finally, ‘indicated preventive interventions’, directed at people who present with some symptoms, possibly indicating the onset of a mental disorder, but who do not yet meet the Diagnostic and Statistical Manual of Mental

Disorders (DSM)-IV diagnostic criteria. Indicated prevention aims to reduce the occurrence of new cases, or to delay the onset of the disorder. In addition, indicated prevention may also reduce the severity of the symptoms and the duration of the sub-threshold condition.



The mental health intervention spectrum for mental disorders
(Mrazek and Haggerty, 1994)

Of the three types of preventive interventions, indicated prevention most closely resembles conventional treatment, and provides the best chance of identifying people with sub-threshold disorders. As described before, these sub-threshold manifestations are the best predictors of the onset of full-blown depression and anxiety disorders (Cuijpers et al., 2005; Smit et al., 2007; Schoevers et al., 2006; Cole, 2008). Furthermore, indicated prevention studies have shown that well-designed interventions are capable of reducing the incidence of mental disorders, and especially depression and anxiety (Cuijpers, 2003).

In the Netherlands, indicated prevention of mental disorders is a substantial and integral part of mental health care (Bohlmeijer & Cuijpers, 2001) Mental health care institutes frequently have a specialised department for prevention, which works closely together with primary health care professionals (Bohlmeijer & Cuijpers, 2001). Several preventive interventions are available for older people with mental disorders (Cuijpers & Willemse, 2005; Lenze & Wetherell, 2009).

1.5 The stepped-care programme

A stepped-care programme, entailing the structured use of a self-report questionnaire, specific extra attention for and education on about depression and anxiety, and structured monitoring, may help people to acknowledge mental health problems and prevent the onset of depression and anxiety disorders.

The aim of stepped-care programmes is to maximise the effectiveness of an intervention, while making the best use of available resources. It makes sense to provide all the time, expertise, and individual attention that a patient needs, but not more. Not all elderly people with sub-threshold anxiety or depression will need the same type or intensity of preventive intervention, and symptoms will often disappear without any active intervention. Although stepped-care seems to be a logical approach from the clinical perspective, surprisingly few studies have actually evaluated the effects of stepped-care programmes.

The generic stepped-care programme in our study was based on the following four assumptions: (a) patients with sub-threshold anxiety and depression need personalised and repeated education, counselling and confrontation with their symptom levels to be able to acknowledge them (empowerment); (b) different people require different levels of preventive activities; (c) determining the right level of preventive intervention is critically dependent on pro-actively monitoring the outcome; and (d) stepping up from lower (less intensive) to higher (more intensive) levels of preventive activities, based on monitored outcomes, may increase effectiveness and lower overall costs.

The participants in the stepped-care programme in our study started with a watchful waiting approach, followed by cognitive behaviour therapy-based bibliotherapy, cognitive behaviour therapy-based problem-solving treatment, and referral to primary care for medication, if required.

In our study, the cognitive behavioural based treatment was chosen to precede medication, because sub-clinical manifestations of late-life depression and anxiety have proven to be amenable to this approach, and older people also seem to prefer psychological treatment over medication (Hepple et al., 2002). Adaptations of short-term and structured forms of psychological treatment, in the form of cognitive-behaviour-based treatment, such as bibliotherapy or problem-solving treatment, (PST) seem promising in an integrated and stepped-care prevention programme (Cuijpers et al., 2008). Since lack of acknowledgement is partly due to mental health illiteracy in elderly people, it is promising to see how both types of treatment help them to understand and acknowledge their symptoms,

and encourage them to stop unhelpful avoidance and turn to more active self-management strategies.

When used as stand-alone treatments, bibliotherapy and PST may not be sufficiently effective (Mead et al., 2005; Schreuders et al., 2005). Subsequent to previous late-life prevention studies based on a single intervention (van Marwijk et al., 2008; van Schaik et al., 2006), it has been suggested that stepped-care and collaborative-care models that focus on monitoring and implementing change in actual practice are the most promising types of intervention (Baldwin & Wild, 2004; Chew-Graham et al., 2007).

1.6 Aims and structure of this thesis

Prospective data derived from the Longitudinal Aging Study Amsterdam (LASA) show that 27% of elderly people in the community with sub-threshold depression develop a major depressive disorder within three years (Beekman et al., 2002). We assume that this percentage is comparable for sub-clinical anxiety, and combined sub-clinical depression/anxiety. The expected incidence rate of DSM-IV depressive or anxiety disorder within two years is estimated conservatively to be 35%. We expected the stepped-care programme to reduce the incidence rate from 35% to 20%.

The primary aims of our study were: a) to develop an indicated preventive intervention for people, 75 years of age and over, living in the community and suffering from sub-threshold anxiety or depression (but with no evidence of the clinical disorders) provided by home care in collaboration with mental health care, and b) to evaluate the effects of this programme, and the cumulative incidence of DSM-IV major depressive disorder or anxiety disorder after 24 months, versus the effects of usual general practice care in the prevention of depression or anxiety disorders.

We hypothesised that the stepped-care programme could prevent the development from sub-threshold to full-blown DSM-IV depression or anxiety disorder in 15% of the participants within two years.

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Framework of the prevention intervention study

In general, ZonMw (The Netherlands Organisation for Health Research and Development) creates with its programmes the frameworks within which organisations from the relevant field can apply for project grants. Incidentally, ZonMW considers certain fields important enough to specifically search for organisations that can carry out the desired research.

These are the so-called top-down projects.
At the beginning of 2003, such a top-down project was assigned in the field of psychological problems in older people. The Trimbos Institute, Groningen University, Leiden University and the VU Medical Centre all worked together on the planning and execution of this project. In this project, elderly people in three Dutch cities who had an above-average risk of developing a 'depression or anxiety disorder' were being counseled with a stepped-care programme. This programme monitored and accompanied, in a series of steps, the process these elderly people go through, and tried to prevent the process from degenerating into a depression or anxiety disorder.
The same project design was adhered to in the three cities, with the same measurement tools, the same outcome measures and the same programme. However, the target groups of elderly people differed on the above-average risk of developing a 'depression or anxiety disorder'. Groningen focused on the prevention of depression and anxiety in older people with diabetes, and therefore reported on comorbidity. Leiden focused on the increased risk for older people who had a history of depression or anxiety, and aimed at the prevention of relapse. Amsterdam, offered the stepped-care programme to older people in primary care with sub-threshold depression and anxiety [*described in this thesis*]. Here, the hypothesis was that the stepped-care programme could prevent the development from sub-threshold to full-blown disorder.
An overall important aspect of the total project was that the individual needs of the elderly person were recognised. Not everybody received the same counseling, because it was tailored to the individual situation of each elderly person.

Chapter 2 presents the protocol of the randomised clinical trial. The primary aim, i.e. evaluation of the effects of the stepped-care programme, is intertwined with the assessment of the feasibility of the programme. In this chapter, the focus is on the design of the study. *Chapter 3* describes about the seriousness of depressive problems in the age-group of people 75 years of age and older. The Centre of Epidemiologic Studies-Depression scale (CES-D) data from the Preventive Intervention Frail Elderly (PIKO) study, in which the stepped-care prevention study was embedded, are the main focus in this chapter. (The CES-D questionnaire also played a key role in the stepped-care programme prevention study; every trimester it was used to assess the depression and anxiety symptoms of the participants.) *Chapter 4* focuses on the main objective of this thesis, the evaluation of effects, and the one-year results are presented. *Chapter 5* concerns the costs of the stepped-care programme. A cost-(effectiveness) analysis was performed on the one-year data. *Chapter 6* presents the 2-year results of the programme. Finally, in *Chapter 7*, the contents of the preceding chapters are summarised, the results of

the study are discussed and placed in a wider perspective, and the considerations and consequences for older people and for primary care are discussed. *Chapter 8* presents a summary in Dutch.

This thesis came about through close co-operation between the EMGO Department of General Practice research team, various health care groups in West Friesland, and many others. In the Acknowledgements ('Dankwoord'), I will express my appreciation of their much valued contributions.

Appendices I, II, and III provide information on the theoretical and practical aspects of Cognitive Behaviour Therapy, 'Bibliotherapy' and 'Problem-Solving Treatment' for older people, as applied in steps 2 and 3 of the stepped-care programme described in this manuscript. The practical (feasibility) aspects are based on the experience gained throughout the stepped-care programme.

Appendices IIa and IIIa are Dutch translations of the theoretical and practical aspects of 'Bibliotherapy' and 'Problem-Solving Treatment' for older people (as applied in this study).

Appendix IV is the folder (in Dutch) with which participants started their active participation in the programme. Step 2, the bibliotherapy phase of the programme, was based on the folder followed by a self-help course.

Page Break

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